

# GLOve User Manual

Thank you for choosing to equip your nitro heli with this innovative device that was designed and built by a fellow hobbyist. It brings me great pride and satisfaction to transform an idea into reality and be able to share it with the RC community. Thank you Jeff Francis for the concept.

*Dave*

The GLOve is a micro processor controlled device that provides an automated link between your on-board glow igniter and the engine's governor sensor. This permits the two devices you already have to perform the following functions automatically:

- Tests the plug at receiver power up to make sure it's good
- Turns on the igniter at the first sign of engine cranking with no external interaction
- Prevents "hot starts" by not allowing the plug to light if the throttle is up
- Turns on the glow to help idle if the engine rpm drops too low (not user settable)

## Wire it up!

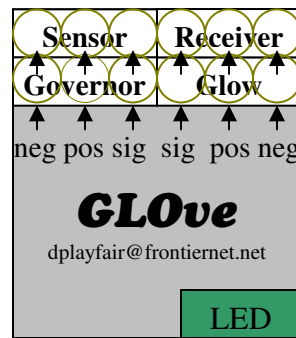
The GLOve has 2 rows of 6 header pins each, allowing 4 male servo connectors to plug in. Through these it receives signals from the receiver throttle channel and the rpm sensor, which it then uses to control the on-board glow igniter. Only for use with 6v or less systems.

**Sensor:** The engine speed sensor connects here  
**Governor:** Connects the sensor back to the governor\*  
**Glow:** The on-board igniter connects here  
**Receiver:** Plugs into the throttle channel of the rx\*\*

**Note:** The black (or brown) wires for *all positions* will be located toward the *outside edges* of the GLOve.

- \* A male to male extension is necessary for this connection, which comes with many governing devices
- \*\* A 3-way male "Y" harness is included to make this connection.

*Depending on your setup, custom harnessing may be required.*



## Calibrate!

Each time the GLOve is powered on it looks for a calibration signal for 2 seconds following a short LED pulse that will cycle the glow igniter, beeping the plug if it is good. The following calibration lets the unit know which direction the servo travels, and where your lower limit is.

*Note: Re-calibration should be performed whenever the throttle setup is changed*

- 1) Turn transmitter on. In "normal" flight mode, lower the throttle stick and trim.
- 2) Power on receiver. After the immediate short flash, move the throttle stick all the way up, then immediately back down. Not too fast!
- 3) The led on the GLOve should flash twice acknowledging the new settings.

The LED should now begin rapid flashing, which indicates it is waiting for a governor sensor pulse to start the glow. Move the stick up to insure it turns off (hot start prevention). However, it should not turn off when moving just the trim up to fast idle speed. If so, recalibrate.

## Operate!

**Power on:** Half second flash briefly turns on igniter to verify plug condition.

**No LED:** Engine not running, throttle not in idle position (or out of calibration)

**Rapid Flash LED:** Engine is not running and throttle is at or below idle, waiting to start.

**Slow Flash LED:** Engine is running, RPM is good, monitoring for low idle condition.

**Steady on LED:** Glow igniter is being told to turn on. Audible signal means plug is lit.

**Note:** The glow driver will be on for 10 seconds each time it is triggered, then will reset. If it continually comes on idle speed may be too low; try increasing it a notch. If the GLOve LED comes on and the igniter doesn't indicate a lit plug, it may be burned out.

**Starting tip:** Because the glow plug may not be fully heated prior to fuel entering the cylinder, it may help to give a quick starter pulse to get the plug lit, then continue cranking a moment later.